

CLAIMS

1. A tamper responsive package comprising:
security material forming a security envelope surrounding a protected region, the security envelope having at least one fold where a first section of security material overlaps a second section of security material;
a thermal conductor positioned between the first section of security material and the second section of security material and forming a thermal pathway between the protected region and an exterior region.
2. A tamper responsive package in accordance with claim 1, wherein the security material is one or more planar sheets of tamper detection mesh.
3. A tamper responsive package in accordance with claim 1, wherein the security material is at least a single sheet of thin material with a pattern of electrically conductive pathways and having an electrical characteristic for changing in response to a tampering of the security material.
4. A tamper responsive package in accordance with claim 3, wherein tampering comprises a cutting of the material.
5. A tamper responsive package in accordance with claim 3, wherein tampering comprises a drilling of the material.
6. A tamper responsive package in accordance with claim 3, wherein tampering comprises a puncturing of the material.
7. A tamper responsive package in accordance with claim 3, wherein tampering comprises a separating layers of the material.

8. A tamper responsive package in accordance with claim 3, wherein tampering comprises separating at least a portion of the material from a housing enclosing the protected device.

9. A tamper responsive package in accordance with claim 3, wherein tampering comprises separating at least a portion of the material from the thermal conductor.

10. A tamper responsive package in accordance with claim 1, wherein the security material is at least a single sheet of thin material with a pattern of electrically conductive pathways and having an electrical characteristic for changing in response to an altering of the security material.

11. A tamper responsive package in accordance with claim 1, wherein the thermal conductor is a section of conductive tape.

12. A tamper responsive package in accordance with claim 11, wherein the conductive tape is copper tape.

13. A tamper responsive package in accordance with claim 1, wherein the thermal conductor is a section of wire.

14. A tamper responsive package in accordance with claim 1, further comprising:

a housing containing the protected device, the security envelope wrapped around the housing.

15. A tamper responsive package in accordance with claim 8, wherein the housing includes an opening for the thermal conductor.

16. A tamper responsive system comprising:
- a housing containing a protected device;
 - a tamper detection mesh shaped around the housing to form a security envelope surrounding the housing, the security envelope having at least one fold where a first section of tamper detection mesh overlaps a second section of tamper detection mesh;
 - a thermal conductor thermally connected to the protected device and positioned between the first section of tamper detection mesh and the second section of tamper detection mesh forms a thermal pathway from the protected device to the exterior region of the security envelope.
17. A tamper responsive system in accordance with claim 16, wherein the thermal conductor is a section of conductive tape.
18. A tamper responsive system in accordance with claim 17, wherein the conductive tape is copper tape.
19. A tamper responsive system in accordance with claim 16, wherein the thermal conductor is a section of wire.
20. A method of removing heat from a protected device within a protected region of a security envelope formed from a tamper detection mesh, the method comprising:
- channeling heat from the protected device through a fold in the security envelope along a thermal conductor to an exterior region of the security envelope.
21. A method in accordance with claim 20, further comprising:
- channeling heat from the protected device through a thermal connection between the protected device and the thermal conductor.

22. A method in accordance with claim 20, further comprising:
dissipating the heat to air within the exterior region through convection.

23. A method in accordance with claim 21, further comprising:
dissipating the heat to a heat sink within the exterior region through conduction.

24. A method in accordance with claim 20, wherein channeling heat from the protected device along the thermal conductor through a fold of the security envelope comprises:

channeling heat from the protected device along the thermal conductor between a first section of tamper detection mesh and a second section of tamper detection mesh overlapping the first section of tamper detection mesh.

25. A method in accordance with claim 24, wherein the providing further comprises:

channeling the heat from the protected device along the thermal conductor through a an opening of a housing enclosing the protected device.

26. A method of manufacturing a tamper responsive package, the method comprising:

attaching a thermal conductor to a protected device; and
enclosing the protected device in a security material to form a security envelope having a fold, the thermal conductor positioned between two or more sections of security material forming the fold.

27. A method in accordance with claim 26, further comprising:

enclosing the protected device in a housing, wherein the enclosing the protected device in the security material comprises wrapping the housing in the security material to form the security envelope.

28. A method in accordance with claim 27, further comprising:

guiding the thermal conductor through an opening in the housing.

29. A method in accordance with claim 28, further comprising:

d-53 → encasing the envelope in a potting material.

30. A method comprising:

mounting a device on a circuit board;

attaching a thermal conductor to the device;

guiding the thermal conductor through an opening within a housing;

enclosing the device in the housing;

enclosing the housing in a security material to form a security envelope

having a fold, the thermal conductor positioned between two or more sections of security material forming the fold; and

d-53 → encasing the security envelope in a potting material.